

OIL AND GAS DOCKET NO. NO. 08-0246891

THE APPLICATION OF LOTUS L.L.C. TO DISPOSE OF OIL AND GAS WASTE BY INJECTION INTO A FORMATION PRODUCTIVE OF OIL OR GAS, LOTUS LEASE WELL NO. 2C, FUHRMAN-MASCHO FIELD, ANDREWS COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner
Mark Helmueller, Legal Examiner

Procedural history:

Application received: March 13, 2006

Hearing held: June 14, 2006

Proposal for decision issued: August 28, 2006

Appearances

<u>Applicant</u>	Representing
John Matthew Sjoberg	Lotus L.L.C.
Dan Snow	
Geri Cooley	
 <u>Protestants</u>	
William Fulbright	Willie G. Davis & Wanda L. (Sue) Davis
Willie G. Davis	
Wanda L. (Sue) Davis	

EXAMINERS' REPORT AND PROPOSAL FOR DECISION

STATEMENT OF THE CASE

Lotus L.L.C. ("Lotus") is seeking to drill and use its Lotus Lease Well No. 2-C as a commercial disposal well for naturally-occurring radioactive material ("NORM") into an existing cavern in a bedded salt formation in Andrews County.

Lotus' application is protested by Willie G. and Wanda L. Davis ("Davis"), surface owners of the property where the proposed well is located.

DISCUSSION OF THE EVIDENCE

Applicant's evidence

Lotus is proposing to drill the Lotus Lease Well No. 2C, into a salt cavern that it is currently operating. Lotus hopes to permit Well No. 2C under the same conditions as it permitted Well Nos. 2A and 2B (Permit Nos. 11239 and 11240). Well No. 2C is necessary to continue efficient NORM disposal operations on the Lotus Lease, and will penetrate the cavern between Well Nos. 2A and 2B.

Lotus has dissolved a cavern below the top of the Salado Formation at 2100'. The Salado Formation in Andrews County, is a bedded salt, containing 18-19% anhydrite. The salt was evaporated from an ancient sea bed and is overlain by the Rustler anhydrite. The salt content of the Salado increases downward and cavern was dissolved between the depths of 2400' and 3100'. The completed injection interval is between 2563' and 3100' for Well No. 2A and between 2558' and 3100' for Well No. 2B.

The cavern has a minimum width of 90', as viewed from the top looking down on the cavern. From the side view, the cavern height is 93' tall at the 2A wellbore, decreasing to 48' at a distance of 385' away. The volume of the cavern is estimated to be 378,405 barrels based on the amount of salt dissolved.

Well No. 2C will be used to control the oil in the roof section of the cavern and will optimize the cavern size by locating a well for optimal filling of the cavern. Well No. 2C may be used as a solution well when Well No. 2A is undergoing maintenance. During this phase of cavern development, Lotus is not proposing to dissolve any more salt by injection of fresh (Santa Rosa) water. Instead, recirculated brine will be used to maintain the cavern until it is filled. The final dimensions of the cavern will be a minimum width of 116' as viewed from the top. From the side, the cavern will be 102' tall at the 2A wellbore, decreasing to 51' at a distance of 385' south.

The total volume to be disposed of is 10,000 barrels per day, at a maximum surface injection pressure of 1200 psi. The fracture gradient is known to be higher than 0.75 psi per foot of depth. The waste that will be disposed of through Well No. 2C consists of contaminated soil and water, pipe/vessel scale including barium strontianite scales, sludge and basic sediment. The waste material includes all products of uranium and thorium--primarily Radium 226 and Radium 228, as well as Lead 210. The request also includes brackish water from the Santa Rosa if necessary for makeup to maintain the cavern.

There are three wells with 1/4 mile of the proposed well. Well Nos. 2A and 2B are active disposal wells. Well No. 2 was drilled incorrectly by Lotus and has never been used for injection. Lotus is waiting on a rig to finish plugging this well. The Lotus No. 1, the only well between 1/4 and 1/2 mile away from the proposed well, is operated by Snow Oil & Gas, Inc. It was drilled to 11,506', and produces from the Fuhrman-Mascho Field.

According to the Texas Commission on Environmental Quality ("TCEQ"), usable-quality ground water should be protected from the surface to 250' and also the Santa Rosa in the interval between 1100' and 1600' in this area. Lotus plans to cement 9-5/8" surface casing to 1750'; and the 7"

long casing string will be set at 2400' and cemented up to the surface.

Lotus' proposed well will be a commercial disposal well and the applicant will comply with all Commission requirements for commercial wells. Prior to beginning operations, collecting and other pits will be permitted separately under the requirements of Statewide Rule 8. A catch basin will be installed to collect waste which may spill as a result of connecting or disconnecting hoses from hauling trucks. All fabricated storage and pretreatment facilities will be constructed of steel, concrete, fiberglass or other approved material and will be maintained to prevent waste discharges. All facilities will be surrounded by dikes which are capable of containing the maximum holding capacity of all such facilities, and any wastes that do accumulate will be removed within 24 hours. Access to the facility will be secured by an attendant, with a fence and locked gate when unattended. Each storage tank will be equipped with a device to alert drivers when the tank is within 130 barrels of being full.

Lotus has an active P-5. Lotus claim it has the legal right to drill the proposed commercial NORM disposal well on two potential grounds. First, it argues they own the uncontested right to develop the salt minerals deposits underlying the property by virtue of Salt Mineral Deed obtained from the mineral interest owner on April 7, 2004. Lotus urges that the provisions of the deed entitle it to complete use of the salt, including the use for commercial disposal of NORM waste.

Lotus also claims it owns 50% of the surface estate by virtue of an acquisition on April 28, 2004 from the beneficiaries of the trust which sold the same interest to the protestants in February 1998. Lotus asserts the original sale to protestants was beyond the power of the trust as the trust had terminated under its own provisions prior to the sale to the protestants. Lotus therefore claims its 50% interest is valid and provides the legal basis for issuing the permit.

Protestants' evidence

The protestants assert Lotus does not possess a legal right to drill the well because the protestants purchased the property in February 1998 and they have not entered into an agreement with Lotus giving them permission to drill the proposed well. Protestants also urge the salt mineral deed while providing Lotus with the right to mine and produce the mineral salt for commercial purposes, does not establish a right to drill a well for commercial NORM waste disposal purposes. Additionally, the protestants object to the Form W-14 filed by the applicant. Protestants claim Lotus erroneously identified its lease as comprising 640 acres when the plat shows it is actually about 221 acres.

In response to Lotus' claim that it purchased 50% of the surface in 2004, protestants respond that their 1998 purchase is a matter of record in Andrews County. Protestants argue it is not possible for Lotus to possess a good faith claim of an ownership interest because the recording statutes place them on notice as a matter of law of the 1998 purchase.

EXAMINERS' OPINION

The examiners believe that this application should be granted. The proposed disposal well will not harm usable-quality water, nor endanger oil and gas reserves. The applicant has demonstrated that the proposed disposal well is in the public interest because it will increase the ability of Lotus to disposal of NORM. Finally, while there was a discrepancy in the published notice of application, the protestants did not contend they received inadequate notice, or otherwise were prejudiced by the discrepancy.

The legal issues created by the salt mineral deed and the disputed property ownership of a 50% interest between protestants and Lotus are not within the jurisdiction of the Commission to adjudicate. With respect to the salt mineral deed, neither party offered any authority regarding the interpretation of a salt mineral deed, other than the generally recognized authority that the mineral estate is dominant and entitled to a reasonable use of the surface to develop the mineral interest. The validity of the underground storage cavern for NORM waste is not at issue in this docket. The only question is whether Lotus can drill another access well for the injection of NORM waste into the storage cavern mined into the salt formation. Absent any specific cases interpreting the provisions of the salt mineral deed for the purpose of drilling a well to access the storage cavern, the examiners believe this presents an issue of contractual interpretation which the Commission is not empowered to adjudicate. Lotus appears to have met the low threshold test of possessing a good faith claim of a right to drill the propose well to access the formation absent any authority to the contrary regarding the interpretation of the salt mineral deed provisions.

Accordingly it is not necessary to discuss the disputed property ownership questions. The examiners would note, however, the determination of whether Lotus obtained a 50% interest in the property in question once again requires interpretations of laws related to trust agreements, deed recordation, and rights of tenants in common which the Commission may not adjudicate.

FINDINGS OF FACT

1. Notice of hearing on this application by Lotus L.L.C. to dispose into the Lotus Lease, Well No. 2C, was issued to all interested persons at least ten (10) days prior to the hearing.
 - a. Notice of the application (Form W-14) was mailed to offset operators, offset surface owners and the Andrews County Clerk on December 14, 2005.
 - b. Notice of the application was published in the *Andrews County News*, a newspaper of general circulation in Andrews County, on December 11, 2005.
 - c. Notice of this hearing was issued by the Commission to offset operators and offset surface owners on May 2, 2006.
2. The Lotus Lease Well No. 2C will be used for disposal of contaminated soil and water, pipe/vessel scale including barium strontianite scales, sludge and basic sediment contaminated by naturally occurring radioactive material produced by oil and gas activity (NORM).
3. Lotus L.L.C. will inject up to 10,000 barrels of waste per day, at 1200 psi maximum surface injection pressure, into a cavern in the Salado Formation between 2400' and 3100'.
4. According to the Texas Commission on Environmental Quality, the base of usable-quality water is at 1600', and the Lotus Lease Well No. 1 will protect usable-quality water with surface casing cemented to 1750' and production casing cemented from 2400' to the surface.
5. There are three wellbores within 1/4 mile of the proposed location all owned by Lotus L.L.C..

- a. Lotus Lease Well Nos. 2A and 2B are active disposal wells with 1/4 mile.
- b. Lotus Lease Well No. 2 was drilled incorrectly by Lotus and has never been used for injection. Lotus is waiting on a rig to finish plugging this well.
6. Use of the Lotus L.L.C. proposed disposal well poses no harm to oil and gas resources in the area. There is only one producing well within 1/2 mile, the Lotus No. 1, that produces from the Fuhrman-Mascho Field much deeper than the Salado salt formation.
7. Use of the Lotus L.L.C. proposed disposal well is in the public interest as it will provide enhanced capacity for the disposal of NORM, thus encouraging further oil and gas development.
8. Lotus L.L.C. Company has a currently active Form P-5 and financial assurance as required by Statewide Rule 78.
9. Lotus L.L.C. obtained Salt Mineral Deed from the mineral interest owner on April 7, 2004.

CONCLUSIONS OF LAW

1. Proper notice was given to all necessary parties as required by Statewide Rule 9 [Tex. R.R. Comm'n, 16 TEX. ADMIN. CODE § 3.9] and other applicable statutory and regulatory provisions.
2. All things necessary to give the Commission jurisdiction to decide this matter have been performed or have occurred.
3. The Salt Mineral Deed provides Lotus L.L.C. with a good faith claim of a right to drill the proposed well to obtain access to the storage cavern in the salt formation.
4. Granting the application to dispose of oil and gas waste containing NORM into the Lotus Lease, Well No. 2C under the terms and conditions set forth in the attached Final Order, will not endanger fresh water resources nor endanger oil or gas resources in the area.
5. No existing rights will be impaired by the use the Lotus Lease, Well No. 2C to dispose of up to 10,000 barrels of saltwater containing NORM at a maximum surface pressure of 1200 psi.
6. Granting the application is in the public interest.
7. The application to dispose of oil and gas waste containing NORM into the Lotus Lease, Well No. 2C meets the requirements for approval pursuant to Statewide Rule 9 and the Texas Water Code §27.051 and §27.073.
8. The terms and conditions set forth in the attached Final Order are reasonably necessary to protect usable-quality water from pollution.

EXAMINERS' RECOMMENDATION

Based on the above findings and conclusions, the examiners recommend that the application of Lotus L.L.C. to dispose of up to 10,000 barrels of oil and gas waste containing NORM per day by injection at a maximum surface pressure of 1200 psi, into the interval between 2400' and 3100' in its Lotus Lease Well No. 2C, near the Fuhrman-Mascho Field in Andrews County, be **GRANTED**, with the conditions proposed in the attached Final Order.

Respectfully submitted,

Mark Helmueller
Legal Examiner

Margaret Allen
Technical Hearings Examiner